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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,850	11/28/2001	Kozo Akiyoshi	13831	8454

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EXAMINER

SHIBRU, HELEN

ART UNIT PAPER NUMBER

2621

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/994,850	Applicant(s) AKIYOSHI ET AL.	
	Examiner HELEN SHIBRU	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 4+7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/01, 9/02, 7/03</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 22 is rejected under 35 U.S.C. 101 because the claim is directed to a recording medium storing nonfunctional descriptive material.

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are neither physical “things” nor statutory processes. See, e.g. Warmerdam, 33 F. 3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory) and merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. See MPEP 2106.IV.B.1.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-6, and 8-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Richards (US Pat. No. 5,343, 241).

Regarding claim 1, Richards discloses an image-effect apparatus, comprising:

an intermediate image generator which acquires a first image, a second image and a corresponding point file for the first image and the second image and generates an

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intermediate image between the first image and the second image (see abstract and claim 1); and

speed controller which controls an operation of said intermediate image generator with respect to a speed at which the intermediate image is generated (see col. 4 lines 37-67, col. 5 lines 1-30 and col. 6 lines 22-40).

Regarding claim 2, Richards discloses a speed specifying unit which receives from a user a desired speed, wherein said speed controller controls said intermediate image generator according to the desired speed (see claim 12).

Regarding claim 3, Richards discloses intermediate image comprises a plurality of intermediate images and said speed controller controls the number of intermediate images generated by said intermediate image generator (see col. 7 lines 9-36 and claim 1).

Regarding claim 5, Richards discloses a display unit which displays the first image, the intermediate image, and the second image as a moving picture (see fig. 2).

Regarding claim 6, the limitation of claim 6 can be found in claim 1. therefore claim 6 is analyzed and rejected for the same reason as discussed in claim 1 above.

Regarding claim 8, Richards discloses processor performs a pixel-by-pixel matching computation based on correspondence between a critical point detected through two-dimensional search on the first image and a critical point detected through a two-dimensional search on the second image (see col. 3 line 42-col. 4 line 25 and col. 6 lines 1-21).

Regarding claim 9, Richards discloses matching processor initially multiresolutionalizes the first image and the second image using the critical points then performs the pixel-by-pixel matching computation between related multiresolution levels

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while also inheriting a result of pixel-by-pixel matching computation at a different multiresolution level in order to acquire a pixel-by-pixel correspondence relation at a finest resolution level at a final stage (see col. 5 and 6 and claims 4-9).

Regarding claim 10, Richards discloses a communication unit which outputs the corresponding point file to an external unit (see fig. 4).

Claims 11 and 12 are rejected for the same reason as discussed in claim 3 above.

Regarding claim 13, the limitation of claim 13 can be found in claims 1 and 2. Therefore claim 13 is analyzed and rejected for the same reason as discussed in claim 1 and 2 above.

Regarding claim 14, Richards discloses intermediate images generated substantially greater than the number of slow motion frame images capable of being generated by an image shooting apparatus which captured said motion picture (see col. 3 line 44-col. 4 line 10 and claim 1).

Regarding claim 15, Richards discloses speed controller and said intermediate image generator operate even during generation of intermediate images such that said intermediate image generator changes a number of the intermediate image generated according to the specification from the user (see claim 12 and col. 4 lines 37-67, col. 5 lines 1-30 and col. 6 lines 22-40).

Regarding claim 16, Richards discloses the motion picture distributed via a network and further comprising:

sampling unit which extracts images as samples from the motion picture and which stores the extracted images (see col. 3 lines 44-49);

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selecting unit which selects the first and second images from said extracted images based on a request from the user for slow motion images (see col. 3 lines 49-58 and col. 5 lines 1-67).

Regarding claim 17, Richards discloses selecting unit selects currently displayed image as the second image and selects an image from a predetermined period of time earlier as the first image (see claim 1 and col. 3 lines 53-64).

Regarding claim 18, Richards discloses a sampling unit which continuously records images; and a selecting unit which allows the user to select the first image and the second image from among the continuously recorded images (see col. 7 lines 4-47).

Regarding claim 19, Richards discloses the user specifies two timings representing the times of first image and the second image (see col. 4 lines 11-36).

Regarding claims 20 and 22, the limitation of claims 20 and 22 can be found in claims 1, 2 and 16. Therefore claims 20 and 22 are analyzed and rejected for the same reason as discussed in claims 1, 2, and 16.

Regarding claim 21, see rejection of claim 14.

Allowable Subject Matter

4. Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571) 272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helen Shibru
March 19, 2006



THAI Q. TRAN
PRIMARY EXAMINER